

X is a halogen;

Y is a chalcogen;

r is 0, 1 or 2, with the proviso that when Y is oxygen, r is equal to 0; and

R' and R'', which may be identical or different, are each hydrogen, or an aryl or lower alkyl radical;

Ar is a compound having at least one double bond and in which the carbon atom from which the double bond depends is an  $sp^1$  carbon or an  $sp^2$  carbon.

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D2 23. (amended) The process of Claim 21, wherein Ar is a lower aryl radical having not more than 10 carbon atoms.

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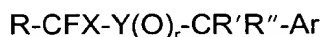
Kindly add new Claims 41-43, as follows:

-- 41. (new) A process for the synthesis of a fluorocarbon compound, comprising reacting:

DB a hydrocarbyl compound containing an  $sp^3$ -hybridized halophoric carbon atom bearing at least two halogen atom substituents, at least one halogen atom having an atomic number greater than that of fluorine and said halophoric carbon atom being bonded to at least one chalcogen; with

a peroxide compound or a halogen or a halogen-base complex.

42. (new) The process of Claim 41, wherein the hydrocarbyl compound is represented by formula (II):



(II)

wherein,

R is a halogen, an electron-withdrawing group or a hydrocarbylchalcogenyl group, a hydrocarbyl radical or the sulfur, selenium or tellurium counterparts thereof;

X is a halogen;

Y is a chalcogen;

r is 0, 1 or 2, with the proviso that when Y is oxygen, r is equal to 0; and

R' and R'', which may be identical or different, are each hydrogen, or an aryl or lower alkyl radical;

Ar is a compound having at least one double bond and in which the carbon atom from which the double bond depends is an  $sp^1$  carbon or an  $sp^2$  carbon.

43. (new) The process of Claim 41, wherein said halogen-base complex is an HF-base complex. --